

IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A method of repairing a Ni-based alloy part having an undercoat layer and a topcoat layer stacked on a Ni-based alloy base when the topcoat layer is damaged, comprising the steps of:

removing a damaged portion of the topcoat layer and a denatured portion of the undercoat layer corresponding to the damaged portion;

forming another undercoat layer formed of MCrAlY in a removed portion where the original undercoat layer has been removed by spraying performed in the atmosphere at a spray particle speed of 300 m/s or more and a base-material temperature of 300°C or less; and

forming another topcoat layer formed of ZrO₂-based ceramics where the topcoat layer has been damaged.

2. (Previously Presented) The method of repairing a Ni-based alloy part according to claim 1, wherein said undercoat layer is formed of Co-based MCrAlY, and said another undercoat layer is formed of a Ni-based MCrAlY having excellent oxidation resistance.

3. (Previously Presented) The method of repairing a Ni-based alloy part according to claim 1, wherein said topcoat layer is formed of ZrO₂-8Y₂O₃ and said another topcoat layer is formed of ZrO₂-Dy₂O₃ or ZrO₂-Yb₂O₃ having excellent oxidation resistance.

4. (Original) The method of repairing a Ni-based alloy part according to claim 1, wherein spraying is applied to the removed portion of the undercoat layer, followed by forming another topcoat layer in the removed portion of the topcoat layer by an electron beam physical vapor deposition method.

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5. (Canceled)

6. (Previously Presented) A method of repairing a Ni-based alloy part having an undercoat layer and a topcoat layer stacked on a Ni-based alloy base when the topcoat layer is damaged, comprising the steps of:

removing a damaged portion of the topcoat layer and a denatured portion of the undercoat layer corresponding to the damaged portion;

applying spraying to a removed portion where the undercoat layer has been removed at reduced pressure, a spray particle speed of less than 300 m/s, and a base-material temperature of 600°C or less; and

forming another topcoat layer formed of ZrO₂-based ceramics in the damaged portion of the topcoat layer.

7. (Original) The method of repairing a Ni-based alloy part according to claim 6, wherein a layer formed of a material having excellent oxidation resistance is used as said another undercoat layer.

8. (Previously Presented) The method of repairing a Ni-based alloy part according to claim 6, wherein said topcoat layer is formed of ZrO₂-8Y₂O₃ and said another topcoat layer is formed of ZrO₂-Dy₂O₃ or ZrO₂-Yb₂O₃ having excellent oxidation resistance.

9. (Previously Presented) The method of repairing a Ni-based alloy part according to claim 6, wherein spraying is applied to the removed portion where the undercoat layer has been removed, followed by forming another topcoat layer in the removed portion of the topcoat layer by an electron beam physical vapor deposition method.

10. (Previously Presented) The method of repairing a Ni-based alloy part according

to claim 1, wherein said topcoat layer is formed of $\text{ZrO}_2\text{-8Y}_2\text{O}_3$ and said another topcoat layer is formed of $\text{ZrO}_2\text{-Dy}_2\text{O}_3$ or $\text{ZrO}_2\text{-Yb}_2\text{O}_3$ having excellent oxidation resistance.

11. (Previously Presented) The method of repairing a Ni-based alloy part according to claim 10, wherein spraying is applied to the removed portion of the undercoat layer, followed by forming another topcoat layer in the removed portion of the topcoat layer by an electron beam physical vapor deposition method.

12. (Previously Presented) The method of repairing a Ni-based alloy part according to claim 2, wherein spraying is applied to the removed portion of the undercoat layer, followed by forming another topcoat layer in the removed portion of the topcoat layer by an electron beam physical vapor deposition method.

13. (New) The method of repairing a Ni-based alloy part according to claim 1, wherein said undercoat layer and said another undercoat layer are formed of different material.

14. (New) The method of repairing a Ni-based alloy part according to claim 13, wherein said topcoat layer and said another topcoat layer are formed of different material.

15. (New) The method of repairing a Ni-based alloy part according to claim 1, wherein said topcoat layer and said another topcoat layer are formed of different material.

16. (New) The method of repairing a Ni-based alloy part according to claim 6, wherein said undercoat layer and said another undercoat layer are formed of different material.

17. (New) The method of repairing a Ni-based alloy part according to claim 16, wherein said topcoat layer and said another topcoat layer are formed of different material.

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18. (New) The method of repairing a Ni-based alloy part according to claim 6,
wherein said topcoat layer and said another topcoat layer are formed of different material.